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OCA-RT-1000 Mar 9 13 12 11 133 Docket No. R97-1

REBUTTAL TESTIMONY OF J. EDWARD SMITH, JR.

ON BEHALF OF THE OFFICE OF THE CONSUMER ADVOCATE

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1 2 3 4 5	REBUTTAL TESTIMONY OF  J. EDWARD SMITH, JR.  STATEMENT OF QUALIFICATIONS
6	My name is J. Edward Smith, Jr., and I am a consultant appearing on behalf
7	of the Office of Consumer Advocate. I previously filed prepared direct testimony in
8	this proceeding as OCA-T-600 together with attached exhibits OCA 601, OCA-602
9	and OCA-603. That testimony and the accompanying exhibits appear at Tr.
10	28/15818-15896. I also prepared and sponsored Library References OCA-LR-8 and
11	OCA-LR-9.
12	My qualifications are included in my direct testimony and exhibit OCA 601 in
13	this docket.

#### I. PURPOSE AND SCOPE OF TESTIMONY

The purpose of my rebuttal testimony is to comment on the direct testimony of Dow Jones & Company, Inc. witness Shew, DJ-T-1 at Tr. 28/15501 *et seq.* My comments on witness Shew's testimony focuses on witness Shew's statements that the data relied upon by Postal Service witness Bradley constitutes a large rich body of data and witness Shew's failure to recognize witness Bradley's study lacks an adequate cost function.

# II. WITNESS SHEW FAILS TO RECOGNIZE WITNESS BRADLEY'S INADEQUATE DATA AND THE LACK OF A SOUND COST FUNCTION

This testimony rebuts selected aspects of the direct testimony of witness

Shew. At page 12 of his prepared testimony, witness Shew states in commenting
on witness Bradley's testimony, "The opportunity to draw upon a large, rich body of
data is of considerable value in estimating cost variability."

Witness Shew fails to note that witness Bradley actually has only two truly exogenous variables in his study with data specifically drawn from the postal system: (1) TPH, and (2) labor hours. These variables are inadequate for the analysis. As stated in interrogatory USPS/OCA-T600-6, the variables which should be included in a cost function consist of a measure of output, a vector of prices of inputs, and "t" denoting time to allow for the analysis of technological change.

Sources referenced for the correctness of this include Dr. Greene and Dr. Ferguson.

<sup>&</sup>lt;sup>1</sup> Tr. 28/15514, lines 5-6.

In fact, witness Bradley's data set is missing a vector of prices of inputs, and the cost function contains a variety of terms that are theoretically unsupportable (for example, all terms with MANR in them) and which are irrelevant in the estimation of a translog cost function. Accordingly, witness Bradley's data set is not a "rich body of data," for it lacks the necessary factor input prices.

On page 14 of his prepared testimony, witness Shew states, "But the practical impact of measuring labor costs in hours instead of compensation is probably small, if compensation rates for clerks and mail handlers do not vary over a wide range."<sup>2</sup>

As has been discussed by both witness Neels and myself, there are significant doubts about the accuracy of witness Bradley's data. For example, the mix of labor hours may very well vary from site to site in terms of direct versus overtime, by craft, and in terms of management versus labor hours. Accordingly, there is reason to believe that the use of labor hours may be a significant problem. In addition, the Postal Service has questioned the reliability of the data that do exist.

On page 16 of his prepared testimony, witness Shew notes, "But even the relatively simple formulation used by Professor Bradley yields some interesting conclusions about labor productivity trends."

<sup>&</sup>lt;sup>2</sup> Tr. 28/15516, lines 1-3.

<sup>&</sup>lt;sup>3</sup> Tr. 28/15518, lines 1-2.

Recognizing that a conclusion should involve some type of explanation about a phenomenon, witness Shew does not reach a conclusion about productivity to explain why on an activity basis it makes any sense to have two trends in place of one trend, nor why productivity increases and subsequently decreases. It is not clear whether the change in productivity is an estimating problem or an actual trend.

On page 18 of his prepared testimony witness Shew state that, "All in all, there can be little doubt that this study of cost variability constitutes a major step forward in improving understanding of the factors driving Postal Service costs."

In fact, both witness Neels and myself have shown there are very significant doubts. The conclusions are based on witness Bradley's lack of a production/cost function analysis, the seemingly unexplained trend in technical change, the focus on a short run cost analysis instead of a longer term cost analysis over the time period in which rates will be in effect, data issues as to whether hours and TPH are meaningful numbers, data scrubbing which has eliminated significant amounts of data, and the desirability of using a cross-sectional analysis rather than a short-term, two-period time series analysis.

<sup>&</sup>lt;sup>4</sup> Tr. 28/15520, lines 5-7.

### VI. CONCLUSIONS

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I do not believe that witness Shew has substantiated his conclusions about witness Bradley's testimony concerning volume variability. He fails to recognize the inadequate data relied upon by witness Bradley, nor does he offer any other alternative data to support his conclusions. Witness Shew also fails to notice that witness Bradley's study is not based upon a sound cost function. For the reasons stated above and in my direct testimony, I believe witness Shew's testimony incorrectly concludes witness Bradley's study is a step forward in determining the factors driving Postal Service costs. In addition to analyzing labor hours, some consideration of investment costs is necessary. Also, additional variables should be considered in the study. Witness Bradley's focus on monthly short-term costing needs to be extended to a longer term. A proper analysis with appropriate data scrubbing would in all likelihood lead to substantially altered conclusions. Therefore, witness Shew's conclusions are not supportable and therefore should not be relied upon as support for the use of witness Bradley's analysis as a basis for establishing the attribution levels of mail processing labor costs.

### **DECLARATION**

I, J. Edward Smith, Jr., declare under penalty of perjury that the document titled Rebuttal Testimony of J. Edward Smith, Jr. On Behalf of the Office of the Consumer Advocate (OCA-RT-1000), March 9, 1998, was prepared by me or under my direction and that my testimony is true and correct, to the best of my knowledge, information and belief.

J. Edward Smith, Jr.

March 9, 1998 Washington, D.C.

### **CERTIFICATE OF SERVICE**

I hereby certify that I have this date served the foregoing document upon all participants of record in this proceeding in accordance with section 12 the rules of practice.

KENNETH E. RICHARDSON

Attorney

Washington, D.C. 20268-0001 March 9, 1998